We claim:

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- A process for preparing graft copolymers of polyvinyl esters by polymerization of
  - at least one vinyl ester of aliphatic C1-C24-carboxylic acids in the presence of
- 10 b) polyethers which are solid at room temperature and have the general formula I

$$R^{1} - \left( O - (R^{2} - O)_{u} - (R^{3} - O)_{v} - (R^{4} - O)_{w} - \left( R^{5} - O \right)_{x} - (R^{6} - O)_{y} - (R^{7} - O)_{z} \right) \frac{1}{s} R^{8} \right)_{n}$$
 I

in which the variables have the following meaning, independently of one another:

- 20 hydrogen,  $C_1-C_{24}-alkyl$ ,  $R^9-C(=0)-$ ,  $R^9-NH-C(=0)-$ , polyalcohol residue;
  - hydrogen,  $C_1-C_{24}$ -alkyl,  $R^9-C(=0)$ -,  $R^9-NH-C(=0)$ -;
- 25  $\mathbb{R}^2$  to  $\mathbb{R}^7$

- 30  $R^9$   $C_1-C_{24}-alkyl;$ 
  - $R^{10}$  hydrogen,  $C_1-C_{24}-alkyl$ ,  $R^9-C(=0)-;$
- -C(=0)-O-, -C(=0)-B-C(=0)-O-, 35 -C (=O) -NH-B-NH-C (=O) -O-;
  - -(CH2),-, arylene, optionally substituted;
- 1 to 8; 40
  - 0 to 500;
  - 1 to 12;
- 45 11 1 to 5000;

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v 0 to 5000;

w 0 to 5000;

5 x 1 to 5000;

y 0 to 5000;

z 0 to 5000

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c) and, where appropriate, at least one other monomer

using a free-radical initiator system, wherein liquid polyalkylene glycol is used as solvent for the free-radical initiator system.

- A process as claimed in claim 1, wherein the solution of the free-radical initiator system is added continuously throughout the polymerization reaction time.
- A process as claimed in either of claims 1 and 2, wherein liquid polyethylene glycol is used as solvent for the free-radical initiator at room temperature.
- 25 4. The use of the polymers prepared by a process as claimed in any of claims 1 to 3 as coating agents, binders and/or film-forming excipients for pharmaceutical dosage forms.
- 5. The use of the polymers prepared by a process as claimed in 30 any of claims 1 to 3 as additives to cosmetic, hygienic and/or dermatological preparations.
- A cosmetic, dermatological, hygienic or pharmaceutial dosage form comprising at least one of the polymers prepared by a process as claimed in claims 1 to 3 in addition to conventional excipients.
  - Graft copolymers of polyvinyl esters obtainable by polymerization of
    - at least one vinyl ester of aliphatic C<sub>1</sub>-C<sub>24</sub>-carboxylic acids in the presence of
- b) polyethers which are solid at room temperature and have the general formula I

28

$$\mathbb{R}^{1} \underbrace{\left( \circ 4\mathbb{R}^{2} - \circ \right)_{u} + \left(\mathbb{R}^{3} - \circ \right)_{v} + \left(\mathbb{R}^{4} - \circ \right)_{w}}_{\mathbf{q}} \underbrace{\left(\mathbb{R}^{5} - \circ \right)_{x} + \left(\mathbb{R}^{6} - \circ \right)_{y} + \left(\mathbb{R}^{7} - \circ \right)_{z}}_{\mathbf{q}} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} \underbrace{\left(\mathbb{R}^{3} - \circ \right)_{v} + \mathbb{R}^{3} - \circ \left(\mathbb{R}^{3} - \circ \right)_{v}}_{\mathbf{q}} + \mathbb{R}^{3} + \mathbb{R}$$

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in which the variables have the following meaning, independently of one another:

hydrogen,  $C_1-C_{24}$ -alkyl;  $R^9-C(=0)-$ ,  $R^9-NH-C(=0)-$ , 10 nolvalcohol residue;

hydrogen,  $C_1-C_{24}-alkyl$ ,  $R^9-C(=0)-$ ,  $R^9-NH-C(=0)-$ ;

 $\mathbb{R}^2$  to  $\mathbb{R}^7$ 15

$$-(CH_2)_{2}-$$
,  $-(CH_2)_{3}-$ ,  $-(CH_2)_{4}-$ ,  $-CH_2-CH(CH_3)-$ ,  $-CH_2-CH(CH_2-CH_3)-$ ,  $-CH_2-CHOR^{10}-CH_2-$ ;

 $\mathbb{R}^9$ C1-C24-alkyl; 20

R10 hydrogen, C1-C24-alkyl, R9-C(=0)-;

Α -C(=0)-O-, -C(=0)-B-C(=0)-O-, -C (=O) -NH-B-NH-C (=O) -O-;

-(CH2)t-, arylene, optionally substituted;

1 to 8;

30 0 to 500;

1 to 12;

1 to 5000; 35

0 to 5000;

0 to 5000;

40 x 1 to 5000;

0 to 5000;

0 to 5000 z 45

and, where appropriate, at least one other monomer

using a free-radical initiator system, wherein liquid polyalkylene glycol is used as solvent for the free-radical initiator system.